*NAIP Web delivery?

John Welter, NWG

*Why?

* Most spatial data is exchanged using a standard file format (tiff, jp2k, sid, etc)
* Most users don't want the pre-determined tiling scheme:
  * clip, zip and ship
  * CCM's versus DOQQ's a good example
* Local storage on client side of some type:
  * Cost (capex/opex)
  * Multiple copies to manage
  * Mange versioning across multiple sites
* More time spent managing data than exploiting it
* Big barrier to new opportunities

* Short term versus lifetime delivery model?
  * Contractor short term – few months?
  * Then transition to long term by USDA?
* What products to host?
  * Compression, 3+3 versus 4 bands, etc?
* What level of SLA needed?

* How?

STANDARDS

- Geospatial industry standards come from:
  - Open Geospatial Consortium (OGC)
  - International Standards Organization (ISO) especially TC 211
- Standards achieve interoperability by allowing data from multiple systems to be taken into the same application
- Standards relevant to the NAIP Program:
  - Web Map Service(WMS)
  - Web Coverage Service(WCS)
  - Catalog Service (CSW) (?)

WMS: Web Map Service

- OGC/ISO web standard to produce and consume a two-dimensional map of spatially referenced data
- Most successful OGC standard with more than 300 implementations
- can be used to portray not only imagery but also vector and terrain data.
- Not suited to 3D clients since it does not provide enough view/portrayal control

WCS: Web Coverage Service

- supports the exchange of raw geospatial data as "coverages" that are bound in space and time without the need to apply portrayal
- No practical clients that consume WCS
- Lacks detailed control for level of detail and field of view calculations required for 3D visualization